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Resolving the meat-paradox

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Abstract

A majority of people the world over eat meat, yet many of these same people experience discomfort when the meat on their plate is linked to the death of animals. We draw on this common form of moral conflict – the meat-paradox – to develop insight into the ways in which morally troublesome behaviors vanish into the commonplace and everyday. Drawing on a motivational analysis, we show how societies may be shaped by attempts to resolve dissonance, in turn protecting their citizens from discomfort associated with their own moral conflicts. To achieve this, we build links between dissonance reduction, habit formation, social influence, and the emergence of social norms and detail our how analysis has implications for understanding immoral behavior and motivations underpinning dehumanization and objectification. Finally, we draw from our motivational analysis to advance new insights into the origins of prejudice and pathways through which prejudice can be maintained and resolved.

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Resolving the meat-paradox: A motivational account of morally troublesome behavior and its maintenance

“The invisible and the non-existent look very much alike.”

— Delos McKown (1993, pg. 39)

Morally troublesome behavior is both common and frequent, and the act of meat-eating provides a particularly salient example. Most people the world over eat meat, yet a vast majority of meat-eaters also find animal suffering offensive, emotionally disturbing, and potentially disruptive to their dietary habits. We term the apparent psychological conflict between people’s dietary preference for meat and their moral response to animal suffering ‘the meat-paradox’ (Loughnan, Haslam, & Bastian, 2010). Meat-eating, like other forms of morally troublesome behavior, conflicts with deeply-held moral principles, yet people seek to justify these self-serving behaviors so as to protect their own interests. We draw on the act of meat-eating to understand this general process. By grounding our analysis in cognitive dissonance theory we identify the motivational nature of such conflicts, and pinpoint triggers and resolutions to dissonance. Further, we show how the process of dissonance reduction itself can work to embed immoral action within individual minds, and how it can spread morally questionable behavior within local populations, shaping societies, institutions, and cultures in ways that ultimately protect people from experiencing associated discomfort. We argue that through the process of dissonance reduction the apparent immorality of certain behaviors can seemingly disappear. To achieve this we draw on new insights into dissonance theorizing and link it to recent work on habit formation. We show how both the motivation to resolve dissonance and the formation of habits can enable the development and spread of supportive social norms, casting a veil over moral conflict. Our analysis aims to uncover

the ways in which morally troublesome behavior can become normalized, go unrecognized, and become resistant to change.

In what follows we first draw on dissonance theorizing to identify key triggers and resolutions to dissonance in the context of immoral action. Next, we demonstrate how the process of dissonance reduction itself can embed morally troublesome behavior within minds and cultures, thereby revealing the ways in which individual responses to dissonance can form habits and shape social norms. Finally, we draw out the broader theoretical implications of our account. First, we identify how our analysis contributes to current work on unethical behavior, and how it relates to theories of moral reasoning, objectification, and dehumanization. We also examine how our account provides a valuable extension upon current theories of moral disengagement. Finally, we establish links between our analysis and other work on prejudice, providing novel insights into where prejudice comes from, how prejudice can be resolved, and the ways in which prejudice may become embedded in minds and cultures. By focusing on the micro-level process of dissonance reduction and linking it to macro-level processes, such as the emergence of social norms and social institutions, we aim to build a broad picture of morally troublesome behavior and its maintenance.

A Dissonance-Based Account of the Meat-Paradox

In modern societies the practice of meat-eating is very popular: most people eat meat. Around 97% of Americans are meat-eaters, a figure that only drops as low as 60% in India, one of the world's least meat-eating nations. Meat is popular because it is an excellent source of protein and calories; it has about 10 times the calorie content of broccoli. Accordingly, it has been sought by humans for millennia (Rozin, 2004). As a dietary strategy, meat provided a number of important benefits: meat-eating allowed ancestral humans to increase their body size without losing mobility due to low energy from poor quality diets, such as those derived from plant food alone (Milton, 1999). Consuming meat also meant that less time was spent foraging for lower quality foods and

more time could be allocated to activities which advanced other traits, such as social and cognitive abilities (Stanford & Bunn, 2001). As such, meat-eating has been credited with a central role in the emergence of human culture (Leroy & Praet, 2015; Rose & Marshall, 1996; Stanford, 1999).

Today, stakeholders in the practice of meat-eating are both consumers – those who benefit from eating meat – as well as producers – those who benefit from the sale of meat. In 2010, the US meat industry processed 9 billion land animals with sales of \$155 billion, and with salaries, taxes, direct and indirect revenues accounting for 6% of the US GDP (approx. \$864 billion; “The United States meat industry at a glance,” 2013).

Meat-consumption has many benefits, nonetheless it also causes animal suffering, a fact that a vast majority of meat-eaters find offensive, emotionally disturbing, and potentially disruptive to their dietary habits. Broadly speaking, prohibitions against harming others are amongst the most widely and deeply held moral beliefs (Graham, Haidt, & Nosek, 2009; Gray, Waytz, & Young, 2012). Deliberately inflicted harm – especially when directed towards weaker others – often evokes anger, disgust, and contempt, which are powerful, aversive, and action-oriented moral emotions (Haidt, Koller, & Dias, 1993). This represents a significant moral conflict – the desire to eat meat vs. concern over animal welfare – which people are motivated to resolve. While this may lead to a decision to stop eating meat the prevalence statistics, along with the broad number of benefits associated with meat-eating, suggest that people are more likely to continue with their meat consumption. Meat-eating is maintained because it serves to benefit the eater: Not only is it a tasty source of protein for most, but additionally it represents a practice from which people and nations can derive their incomes and identities (Berndsen & van der Pligt, 2004, 2005; Loughnan, Bastian, & Haslam, 2014; Rozin, 1996a, 2006).

The meat-paradox can be understood from the perspective of dissonance (Festinger, 1957; Harmon-Jones & Harmon-Jones, 2007). Dissonance refers to a state of emotional discomfort that people experience when they hold inconsistent attitudes or engage in behavior that is inconsistent

with their attitudes or beliefs (Aronson, 1968, 1992; Festinger, 1957; Stone & Cooper, 2001; Thibodeau & Aronson, 1992). Applied to meat-eating, dissonance arises when people experience conflict between the act of meat-eating and the harm this culinary behavior inflicts on animals. At the heart of the tension between meat-eating and concern for animal welfare is the experience of conflict between two dissonant attitudes. To state this formally, my belief that animals are morally relevant creatures that deserve to be protected from harm (including death) is inconsistent with my desire to eat their meat. The belief that animals should not be harmed, on its own, would predict a decision not to eat meat, yet when paired with a range of beliefs about meat-eating – that it is enjoyable, nutritional, or socially valuable – animal welfare concerns may have little influence on behavior. Nonetheless, in the context of meat-eating, animal welfare concerns create negative affect, threatening peoples' enjoyment.

The apparent attitudinal inconsistency between both desiring meat and having concerns over animal welfare may itself be a source of dissonance consistent with Festinger's (1957) original formulation: It is simply that these two attitudes are dissonant which creates the experience of negative affect. In the case of the meat-eating, however, we argue that more is at stake. It is not simply an expectancy violation (Aronson, 1969; Proulx & Inzlicht, 2012) of the form, "if meat animals are morally relevant, why do I enjoy eating them so much?" Rather it is a morally significant conflict – one that may threaten self-perception (cf. Barkan, Ayal, & Ariely, 2015; Bem 1967; Stone & Cooper, 2001). Bringing harm to others is inconsistent with a view of oneself as a moral person (Aquino & Reed, 2002; Reed & Aquino, 2003). As such, meat-consumption leads to negative affect for meat-eaters because they are confronted with a view of themselves that is unfavorable: "How can I be a good person and also eat meat?"¹ We argue that dissonance arises

¹ We note here that dissonance may also arise due to a more visceral response to harm (see Cushman, Gray, Gaffey, & Mendes, 2012) which causes a mismatch between how we would like to feel and how we do feel. In the case of the meat-paradox, however, the act of meat-eating is generally disconnected from the harmful act suggesting that negative affect should be primarily driven by the inconsistent cognitive state rather than immediate visceral responses to harm, for most consumers.

when people fail to resolve this perception, and therefore feel that their beliefs, attitudes, and behaviors are at odds (see Festinger, 1957; Festinger & Carlsmith, 1959; for an account of ethical dissonance see Barkan, Ayal, Gino, & Ariely, 2012). It is the associated negative affective state which motivates attempts to resolve dissonance (Elliot & Devine, 1994).

Consistent with classic accounts, dissonance over meat-eating has a number of strong motivational properties: (a) meat-eating represents a behavioral commitment (Brehm & Cohen, 1962); (b) people are personally responsible for meat-eating (Wicklund & Brehm, 1976); and (c) the recognition that the act of meat-eating brings harm to animals violates standards or expectations critical for the maintenance of a positive self-concept (Aronson, 1968). Particularly salient for understanding the application of dissonance to meat-eating is the action-based model of dissonance (Harmon-Jones, Amodio, Harmon-Jones, 2009; Harmon-Jones & Harmon-Jones, 2002, 2007; Harmon-Jones, Harmon-Jones, Fearn, Sigelman, & Johnson, 2008; Harmon-Jones & Mills, 1999). This model highlights that the process of dissonance reduction is often motivated by the need to facilitate effective behavior: When people are committed to morally questionable behavior they will find ways to resolve dissonance in order to enable the effective pursuit of that behavior. Figure 1 provides an overview of our motivational account. A key prediction of the action-based model of dissonance is that the process of dissonance reduction leads to an *increase* in behavioral commitment, thus providing an important insight into the ways in which morally troublesome behaviors can be reinforced and maintained.

In what follows, we detail three specific sources of dissonance associated with morally troublesome behavior and review three key strategies through which people may seek to reduce dissonance in order to enable action. We then detail how the process of dissonance reduction can lead to an increase in behavioral commitment. Next, we turn to an account of how these ‘active’ dissonance reduction strategies may facilitate ‘passive’ dissonance avoidance by embedding morally troublesome behavior within minds and cultures.

Triggers and Resolutions to Dissonance

We argue that there are three avenues through which sensitivities to morally troublesome behavior may emerge as well as pathways through which the immorality of such behaviors may seemingly disappear: *harm*, *responsibility*, and *identity* (see Figure 1). When people take responsibility, acknowledge harm, and accept the identity relevant consequences of their actions, they will experience dissonance and cease their immoral behavior. In the context of meat-eating this is consistent with the observation that most vegetarians in Western societies cite concerns about the ethics of raising and slaughtering non-human animals for meat as major factors in their dietary choice (e.g., Beardsworth & Keil, 1991; 1992; 1997; Fox & Ward, 2008; Hussar & Harris, 2009; Jabs, Devine, & Sobal, 1998a; Neale, Tilston, Gregson, & Stagg, 1993; Santos & Booth, 1996). Yet, as we note above most people continue to eat meat. By minimizing harm, denying responsibility, and diffusing the identity relevant implications of their actions, people reduce dissonance and enable their consumption of meat.

Harm

Acting in ways that harm the interests of others is only psychologically problematic to the extent that those others are perceived to have the capacity to suffer. Harm is only aversive when it is directed toward *morally relevant* others. Smashing a rock, for example, is harmful to the rocks integrity but hardly aversive because rocks are not morally relevant others – they cannot *experience* harm. In general, the extent to which an entity is considered to possess mental capacities (e.g., especially those that are tied to the capacity to suffer: Haslam, Bain, Douge, Lee, & Bastian, 2005; Leyens, et al., 2001) it is also considered to be morally relevant and therefore worthy of protection from harm (Gray, Gray, & Wegner, 2007; Gray, Young, & Waytz, 2012; Waytz, Gray, Epley, &

Wegner, 2010). People will, therefore, only experience dissonance to the extent that they consider the target of their action to have the capacity to suffer from harm.

On this basis, causing harm to others who have minds is a source of dissonance. Critically, perceptions of others capacities for mental experience are surprisingly flexible (Epley, Waytz, Akalis, & Cacioppo, 2008; Marcu, Lyons, & Hegarty, 2007). In the case of animals, our perceptions of their internal world shifts to fit the exclusion criteria for moral concern *de jour*; when moral relevance was based on having a soul, this is what animals lacked (Aquinas, 1976a, 1976b), and when it required the capacity to reason, animals' cognitive inferiority became conveniently clear (Descartes, 1649). These theories of animals' morally relevant qualities provided a useful justification for their instrumental treatment within human societies. Perceptions of animal's minds may also shift situationally, when we use them for our own needs (Bastian, Loughnan, Haslam, & Radke, 2012; Bilewicz, Imhoff, & Drogosz, 2011; Loughnan, Haslam, & Bastian, 2010). When animals are perceived to have a reduced capacity to experience pain, suffering, or understanding, our concern for their welfare generally decreases (Opotow, 1993; Plous, 1993, 1996, 2003; Singer, 1991; Westbury & Neumann, 2008) and eating them becomes less dissonance arousing.

Categorization is another process through which people seek to reduce the perceived harmfulness of their behavior. Categorization has a profound influence on how people perceive and experience their social world (Rosch, 1999) and may operate to reduce the perceived harmfulness of one's behavior. This is clear in the case of meat-eating, where only a tiny fraction of edible animals make the socially and culturally defined category of 'food animal' (Rozin, 2003, 2007; Rozin & Fallon, 1986; Tambiah, 1969). Different societies categorize different animals as food or non-food (for a review, see Schwabe, 1979; Herzog, 2010); dogs are considered food in parts of Korea and China, but not in Western societies. The category into which an animal falls can also shift over time; whales and horses were once widely considered food animals by Europeans,

whereas they are now considered wildlife and pets, respectively (Anthony, 2007; Mawer, 2000). Direct evidence for the role of categorization in reducing moral concern was provided by Bratanova, Loughnan, and Bastian (2011). They found that when an unfamiliar animal was categorized as food (i.e., it is cooked and eaten), people attributed it significantly less capacity to suffer. Belonging to the ‘food animal’ category can serve as a conceptual frame (e.g., Barsalou, 1990; Yamauchi & Markman, 2000). Once an animal belongs to the ‘food’ category, category relevant attributes are more central (e.g., tastiness, tenderness, fattiness) and category-irrelevant attributes become less central. Importantly, since suffering is not food relevant for most consumers, placing an animal in the food category may reduce its perceived capacity to suffer, helping to reduce dissonance.

Another key way that people may obscure their harmful behavior is through benevolence (e.g., Dixon, Levine, Reicher, & Durrheim, 2012; Glick et al., 2004). For decades religions have professed that humans have dominion over animals (Webster, 1995). By casting ourselves as the custodians of the animal kingdom, and the owners of our pets, we feel it is our right and privilege to decide on their fate. Killing therefore seems less psychologically problematic – they are subordinate rather than equal. In the case of meat-eating this allows us to view our ‘humane’ processing systems as reducing harm, thereby offsetting the loss of life. As such, when subordinates accept their place within the social hierarchy it reinforces the perception that our actions are within their best interests. This is perhaps why meat-animals are often portrayed as happy and smiling on restaurant menus or on advertising billboards – they are happy and willing participants in their subordination.

Responsibility

A sense of personal choice and responsibility are central to dissonance related-processes. When people feel that they have freely chosen their attitudes or behavior they are likely to

experience a subjective state of dissonance when those attitudes or behaviors are in conflict (Cooper, 1971). A key way in which people seek to obviate their moral responsibility for adverse outcomes is to adjust perceptions of their agency (Ritov & Baron, 1990; Spranca, Minsk, & Baron, 1991). As Bandura (1999) suggests, people may reduce responsibility by viewing their behavior as dictated by authorities or diffused through collective action. Following orders or seeing ones actions as a mere drop in the ocean of collective harm, can obscure perceived agency and control. Understanding how people share the burden of responsibility with others is important for contexts in which people disengage from actions that are clearly immoral. Here, however, we consider the ways in which morally troublesome behavior itself can become seemingly justified and appear relatively benign. We focus on three specific beliefs that may serve to obscure personal responsibility for harm by changing how the act itself is understood. These beliefs relate to viewing the behavior as natural, normal, and necessary (for some ideas on this see Joy, 2011) and they serve to frame behavior as a given, rather than a choice, allowing people to feel that their actions are not freely chosen, in turn reducing dissonance (Cooper, 1971).

In the case of meat-eating, there is a longstanding argument that meat consumption is a natural state for humans. Advertising campaigns have leveraged the idea that not only is meat-eating primarily responsible for the development of the human species and human society, but literally that “humans were meant to eat meat” (Macleod, 2006; Peace, 2008). This ‘naturalization’ of meat-eating draws on a view of human behavior, including food selection, as driven by a range of primitive instincts (Winston, 2002). It appears that meat-eaters endorse this notion (e.g., Rothgerber, 2014). In a recent study, Piazza et al (2015) asked around 300 people to report three reasons ‘why you think it is ok to eat meat’. Across two studies, 17-23% of justifications stated that meat consumption is natural (e.g., ‘Humans are carnivores’). Further, the more people endorsed the idea that meat-eating is natural, the more meat they reported eating.

A reliance on social norms is also an avenue through which people can obscure their personal responsibility. Meat-eating is a normal behavior for a majority of the world's population, and an everyday norm for the majority of people living in developed nations. Meat-eaters can rely on the notion that meat-eating is normal to justify their meat consumption. In their study of meat-eating justifications, Piazza et al (2015) found that between 10-12% of justifications appeal to the idea of normality (e.g., 'Society says it's okay'). Increased normality beliefs were also associated with higher levels of meat consumption (Piazza et al., 2015). This is consistent with the notion that people often rely on social norms or external pressures to provide a justification for their actions (Ayal & Gino, 2011; Gino & Ariely, 2012; Gino & Pierce, 2009; Sachdeva, Iliev, & Medin, 2009; Kulik, Sledge, & Mahler, 1986), thereby reducing a sense of personal choice. Indeed, some have interpreted Milgram's (1963) study on obedience to authority as demonstrating a reliance on social norms to justify harmful behavior (see Reicher, Haslam, & Smith, 2012).

Finally, viewing a behavior as necessary can serve to obscure personal responsibility. In the case of meat-eating this belief centers on the idea that we must eat meat to survive or that we simply cannot get enough protein for healthy living from a meat-free diet. Piazza et al (2015) identified perceived necessity as the major justification offered for meat-eating: 36-42% of all justifications stated that meat consumption was necessary (e.g., 'Humans need meat to survive'). In addition to capturing a large number of justifications, necessity was also significantly correlated with higher levels of consumption of beef, pork, lamb, chicken, fish, and seafood. It is not difficult to see how perceiving a behavior as necessary undermines perceived personal choice: by definition actions which are mandatory or essential are antonyms for choice.

Personal choice is a key ingredient in producing dissonance (Festinger, 1957), and by framing immoral behavior as natural, normal, and necessary, people reduce the sense of personal choice and agency associated with their behavior. Furthermore, these beliefs also make the

alternatives (i.e., not engaging in such behavior) appear abnormal and deviant, casting doubt and suspicion over those who abstain (e.g., Jetten & Hornsey, 2011).

Identity

A critical determinant of dissonance is whether the moral implications of behavior reflect on the self. The recognition that one has freely chosen to engage in morally troublesome behavior will conflict with a perception of the self as a good person, a self-view that we are motivated to maintain (e.g., Aquino & Reed, 2002; Alicke, Klotz, Breitenbecher, Yurak, & Vredenburg, 1995; Sedikides & Gregg, 2008; Taylor & Brown, 1994). As we argue above, people may obscure their freedom of choice to avoid dissonance, however they may also find creative ways to buffer their identities from the negative consequences of their behavior.

Research has uncovered a variety of ways in which people may seek to protect themselves from their immoral behavior. Perhaps the most straightforward is to hide the frequency with which a particular behavior occurs. For instance, research suggests that people lie and cheat much more often than they care to admit (e.g., Gino, Ayal, & Ariely, 2009; Tenbrunsel, Diekmann, Wade-Benzoni, & Bazerman, 2010) or they may behave dishonestly enough to profit, but honestly enough to delude themselves of their own integrity (Mazar, Amir, & Ariely, 2008). Just so, people may under-report how often they eat meat, limit their meat intake, or eat only certain types of meat (Rothgerber, 2014; 2015a; 2015b), thereby reducing dissonance by emphasizing ‘responsible’ behavior. Another strategy may be to judge others behavior more harshly in order to present oneself as more virtuous and ethical (Barkan et al., 2012). This strategy is consistent with a tendency to become horrified over the consumption of dog meat but to maintain that the consumption of cows has no moral cost.

In sum, our dissonance-based account predicts that harm, responsibility, and identity are key triggers of dissonance and resolving one or other of these factors will reduce discomfort. It is

possible that people may seek to resolve all three factors, however based on the principle of least effort we propose that these strategies operate as a ‘cascade of denial’. When harm is sufficiently minimized, personal choice and identity buffering may be unnecessary. When harm becomes inconveniently apparent, obfuscating personal choice is likely to take place. Finally, as we note above, when these two strategies have both failed, identity buffering is likely to emerge. The order in which this cascade of denial occurs is likely to depend on a range of contextual factors, however our analysis suggests that each strategy will work in concert; when one fails others will take hold, activated by the reappearance of discomfort associated with dissonance and identity-protection concerns.

When Dissonance Reduction Increases Behavioral Commitment

Our approach makes the prediction that the process of resolving each source of dissonance will not only reduce discomfort thereby enabling behavior, but will serve to *increase* behavioral commitment, thereby reinforcing and maintaining morally troublesome behavior. This is a key tenant derived from the action-based model of dissonance and is referred to as the “spreading of alternatives” (Harmon-Jones & Harmon-Jones, 2002, 2007; Harmon-Jones, Amodio, Harmon-Jones, 2009; Harmon-Jones, Harmon-Jones, Fearn, Sigelman, & Johnson, 2008; Harmon-Jones & Mills, 1999). Harmon-Jones and Harmon-Jones (2002) showed that when people make difficult decisions that are tied to action-oriented states they become more committed to their chosen behavior compared to when decisions are easy and they are less action-oriented. In this way, once people have decided to engage in a given behavior they become more motivated towards the goal of enacting that behavior (cf. Beckmann & Irle, 1985; Gollwitzer, 1990; Heckhausen, 1986; Kuhl, 1984) and they view the alternative as a less viable option. This spreading of alternatives is especially likely in contexts where people are motivated to engage in self-serving behavior (an action-oriented state) that is inconsistent with their own moral standards (a difficult decision). By

viewing the chosen behavior more positively, and the alternative more negatively, people are able to reduce dissonance and enable effective and un-conflicted action. On this basis, committing to the behavior and seeing it as the right thing to do is a powerful way to reduce dissonance. We draw on this specific characteristic below to understand how dissonance reduction may embed immoral behavior within minds and cultures.

An especially powerful example of how efforts to resolve dissonance may reinforce harmful behavior comes from a study by Martens, Kosloff, Greenberg, Landau, and Schmader (2007) who found that when participants were asked to engage in a task where they believed they had killed bugs they were more likely to go on and kill more bugs. This was only the case for those who perceived some similarity to bugs. To this extent, the more threatened people felt in response to the act of killing bugs (due to perceived similarities) the more likely they were to go on and kill more. This increased killing was also associated with increased positive affect and reduced negative affect. In short, feeling bad about killing bugs to begin with led to increased killing, which in turn made people feel better. This work suggests that further engagement in harmful behavior served to reduce dissonance associated with past harmful behavior.

We can see evidence for this same dynamic in the case of meat-eating. By resolving dissonance associated with animal harm, meat-eaters not only reduce their levels of discomfort, they also increase their commitment to eating meat. As we note below, this is perhaps one reason that the consumption of meat has become ritualized and symbolic. Beyond personal commitment, the process of dissonance reduction, and the spreading of alternatives specifically, should lead meat-eaters to see the vegetarianism as both a less viable option and a less desirable one. Consistent with this is the long history of polarized beliefs around meat-eating (cf. Ruby, 2012). Vegetarians were persecuted in 12th century China and viewed as heretics by the Roman Catholic Church during the inquisition (Kellman, 2000). Little over 50 years ago they were characterized as domineering and secretly sadistic (Barahal, 1946) and vegetarianism was proposed as the underlying cause of

medical conditions such as stammering (Dunlap, 1944). Negative or stereotypical attitudes towards vegan's and vegetarians also persist today; they are often viewed as pacifists, hypochondriacs, drug-users, weight conscious, feminine, and liberal (Ruby & Heine, 2011; Sadalla & Burroughs, 1986). By casting vegetarianism and vegetarians as suspect, this further reduces the experience of dissonance for meat-eaters while simultaneously reinforcing their own decision to eat meat.

Embedding Immoral Behavior in Minds and Cultures

Our dissonance-based account provides important insights into how a recognition of immoral behavior may emerge, and the avenues through which people will seek to reduce dissonance and protect their identities. This process of dissonance reduction may also increase commitment to immoral behavior as people come to view their chosen behavior more positively and the alternative more negatively. These 'active' strategies involve psychological effort in order to justify immoral behavior, yet the process of effortful dissonance reduction may itself foster the emergence of 'passive' avoidance mechanisms, by embedding immoral behavior within minds and allowing it to spread and become entrenched within societies and cultures. To this end, we develop an analysis of how the process of dissonance reduction may promote the formation of habits, which themselves shape cultures in ways that ultimately protect people from feelings of dissonance associated with morally troublesome action.

We begin with the assumption that it is *unlikely* that people engage in the process of dissonance reduction each and every time they engage in morally troublesome behavior. Rather, repeated dissonance experiences across a lifetime may begin to shape how people chronically construe their behavior and absent salient triggers, less and less cognitive dissonance is likely to accompany the enactment of this behavior across time. Our analysis indicates that the process of dissonance reduction can gradually shape individual minds and cultures, and in this way shares similarities with classic work which highlights a general tendency to avoid dissonance evoking

information (Abelson et al., 1968; Frey, 1982; Mills, 1965); a process that shapes chronic beliefs and perceptions. In effect, through repeated dissonance reduction, the immorality of a given behavior ultimately ‘disappears’. We now turn to discuss this disappearing act by examining three ways that dissonance may be gradually reduced and ultimately avoided from the development of individual habits, to the spread of supportive social norms that protect people from experiencing discomfort associated with immoral behavior (see Figure 1).

Dissonance reduction as habit

We argue that a major source of dissonance in response to morally troublesome behavior is when people consciously reflect on the harmfulness of their behavior, their responsibility for that behavior, or the identity relevant consequences. Reducing the extent of conscious reflection is therefore a powerful way in which people can guard against dissonance. Habits are especially effective in achieving this aim because they lead to relatively automatic behavior (Quinn, Pascoe, Wood, & Neal, 2010). In fact, behavioral habits are relatively independent of peoples’ goals or intentions and are instead triggered by the contexts in which behaviors are learned (Wood & Neal, 2009), meaning that habits can lead to the initiation of behavior without intention and can run to completion without conscious reflection (Neal, Wood, & Quinn, 2006). Indeed, the ability of habits to facilitate ‘mindless’ food consumption has already been demonstrated. Neal and colleagues (Neal, Wood, Wu, & Kurlander, 2011) found that when placed in the appropriate context (i.e., a movie theater), habitual popcorn-eaters ate equivalent amounts of popcorn regardless of its quality – whether it was fresh or stale. In the case of meat-eating, we might similarly expect that habitual meat-eaters, when placed in the appropriate context (e.g., a burger restaurant), will be uninfluenced by the conditions of animal welfare that led to their meal. This suggests that by developing habits around meat-eating, people may be able to enact this behavior with little conscious reflection on the consequences; thereby reducing the likelihood that issues related to animal suffering will become

salient. Habits literally allow people to engage in meat-consumption without reflection, and therefore to avoid the experience of dissonance.

Meat-eating is a strong candidate for the development of behavioral habits. Habits develop over time for behaviors that are highly repetitive. Furthermore, habits are most likely to form in stable contexts, where direct associations in memory between responses and contextual cues can form. The high prevalence and frequency of meat-eating in the general population and the stability of the context (e.g., meal times) in which meat-eating occurs suggests that habits around meat-eating should form relatively easily.

While habits may form in cases where morally troublesome behavior occurs at high frequency and in stable contexts, our motivational analysis suggests that the process of reducing dissonance may itself encourage habit formation. As we note above, increasing commitment to one's chosen behavior, and viewing the alternative as less viable (the spreading of alternatives) is a way in which people reduce dissonance and enable effective action. We suggest that this may also be a key way in which habits can form. By reducing the perception of choice, the process of dissonance reduction also reduces the need for reflective awareness of behavior – if there is only one option, reflecting on that option is of little use. Over repeated episodes, the process of dissonance reduction can lead to the initiation of behavior without intention and the completion of that behavior without conscious reflection. To illustrate, when a meat-eater walks into a restaurant their intention is only to 'eat', the act of 'meat-eating' is not seen as a choice and therefore they order the steak without consciously intending to 'eat meat'. In due course, they will eat the steak as they typically do with little conscious reflection that they have eaten meat. For the meat-eater, eating food is intentional, but eating meat is simply a habitual by-product of that process.

In sum, we suggest that dissonance reduction itself leads to the development of habits, which once set in place reduce awareness of morally troublesome behavior and protect against dissonance.

Dissonance reduction goes viral

Drawing on our dissonance-based account of morally troublesome behavior, we argue that ‘active’ strategies to resolve dissonance may lead to the spread of such behavior within local populations. One way in which this may occur builds from our analysis of habit formation above. When a particular behavior becomes habitual people are likely to engage in it with little reflection and probably at a relatively high frequency. Critically, this does not occur in isolation. Habitual behaviors are enacted within social contexts and can quickly spread through large populations. This has been shown in the case of health behaviors, such as diet (obesity: Christakis & Fowler, 2007), smoking (Christakis & Fowler, 2008), and alcohol consumption (Rosenquist, Murabito, Fowler, & Christakis, 2010). Meat-eating is also predicted by social influence, with people more likely to eat meat when their family or friends eat meat, and more likely to stay vegetarian when such a diet is supported by their social network (Ruby, 2012; Jabs, Devine, & Sobal, 1998b). Like health behavior, meat-eating is likely to spread and to become stabilized within a given population: A possibility that is supported by the fact that 97% of Americans are meat-eaters, a figure that does not drop appreciably in most other countries.

There are two reasons that habits are especially likely to spread through cultures and influence the behavior of others: Because habitual behaviors are likely to occur with a high level of frequency and with a low-level of reflection. People tend to infer others attitudes from observation of their behavior. When behaviors occur frequently and with little conscious reflection, people will infer that those who enact them hold attitudes that are consistent with that behavior. As we point out above, the meat-paradox is a source of discomfort for most meat-eaters, yet when those same people engage in the act of meat-eating frequently, without reflection, and with little-to-no discomfort, it would appear they are immune to any moral conflict. Observers of habitual behavior will therefore view such behavior as normative and ‘agreed upon’, and will engage in the same

practice even if they are not personally supportive (Miller & McFarland, 1991). For instance, Prentice & Miller (1993) demonstrated that students believed they were more uncomfortable with binge drinking practices than their peers at college, even though they engaged in the behavior to a similar extent.

Another step in our argument is that just as habits may facilitate the spread of immoral behavior, once those habits are writ large within a given population their collective enactment will further protect against the need for critical reflection, and in turn dissonance. We argue that when morally troublesome behavior is not only embedded within individual minds, but within entire populations, people will rarely experience dissonance. The opportunity for conscious reflection will simply not occur. Critical communication around the implications of the behavior, or whether it aligns with people's broader goals or intentions, will likely be absent. As an example, in cultures that are perceived to be supportive of particular forms of bias, public communication will be characterized by the expression of prejudice and people will more readily accept these 'prejudices' into their self-concept (Crandall & Eshleman, 2003). In these contexts it becomes increasingly difficult to see that such attitudes or beliefs may be prejudicial in the first place, further accelerating their acceptance and communication. So too, in cultures where bribing public officials is widespread, the perception that such behavior is corrupt or antisocial is unlikely to emerge. Indeed, in such contexts people may become relatively brazen and even open about their engagement in such practices.

Our argument so far is that dissonance reduction may lead to the spread of immoral behavior because it fosters habit formation, and such habits are interpreted and adopted by those within the local social context. Yet, our motivational approach suggests that dissonance reduction may play a more direct role in spreading immoral behavior. According to dynamic social impact theory (Latané, 1996; Nowak, Szamrej, & Latané, 1990) persuasiveness, supportiveness, and polarization are three factors that determine whether attitudes or behaviors will spread throughout a

given social context. We suggest that the micro-level process of dissonance reduction can lead to macro-level polarization and resistance to change. As Harmon-Jones and Harmon-Jones (2002) note, dissonance reduction leads to the spreading of alternatives, making others choices seem less attractive. We suggest that this *individual-level polarization* will feed into *social polarization*. By defending their own behaviour, casting it as the preferred alternative, and derogating those who oppose it or choose the alternative, these individuals will subtly (or perhaps explicitly) recruit others to share in their point of view, leading to polarization within society at large.

According to dynamic social impact theory, social influence will be catastrophic, as opposed to incremental, for important issues (Latané, 1996). That is, rather than leading to convergence, important social issues will be especially likely to promote polarization and resistance to change. Our analysis suggests that one reason issue importance may promote polarization is because important issues are more likely to create dissonance. For those who are committed to their self-serving biases they will work harder to reduce dissonance, vigorously defending their behaviour, and seeking to recruit others. Indeed, one of the key ways in which people may seek to resolve their own dissonance is to influence others to share their views thereby enabling increased social support for their self-serving behavior and/or the status quo.

Our motivational approach to understanding immoral behavior and its maintenance supplements the cognitive account offered by Latané (1996), highlighting the role of motivation in spreading and supporting such behavior. Furthermore, we offer an account of how increased behavioral commitment, arising from efforts at dissonance reduction and via its role in the production of habitual behavior, may specifically achieve this. Our analysis suggests that the experience of inconsistency may not only shape minds but may shape cultures in ways that can effectively camouflage the immorality of certain behaviors and protect individuals from associated discomfort.

To turn to meat-eating, beliefs, behaviors and habits associated with meat-eating are prime candidates for these dynamic processes to take hold. Given the value of meat in the human diet it is also an important issue on which people are committed and are likely to resist opposing social influences (e.g., the views of vegetarians), leading to *polarization*. As we already note above, there is a long history of derogating vegetarians, creating polarization between those who eat meat and those who choose not to – a fact that also fits well with our current analysis. This polarization further supports the spread and maintenance of meat-eating by facilitating a *supportive* culture.

Dissonance reduction gets outsourced

When people seek to reduce dissonance associated with morally troublesome behavior this may lead to the formation of habits that are spread and maintained within cultures. Furthermore, by encouraging polarization around important issues, dissonance reduction may directly spread immoral behavior. We argue that beyond embedding immoral behavior within people's minds and spreading it through populations, the process of dissonance reduction may also shape social structures in ways that work to further avoid dissonance. We start from the premise that highly visible cultural norms and practices tend to develop around valued behaviors. As we have detailed above, dissonance reduction leads to the spreading of alternatives where people view their chosen behaviors as more valuable, and in this way they become more committed to them. It therefore follows that cultural norms and practices will tend to develop around behaviors that have the potential to create dissonance, and which have become valued as a result of dissonance reduction. Furthermore, the process of embedding such behaviors within cultural practices protects against dissonance by changing the value of such behaviors.

A good example of this process is the almost ubiquitous tendency for nations to build their identities around acts of war (e.g., through remembrance days; Liu et al., 2005; Liu & Hilton, 2005). One reason for this may be that acts of war arouse high-levels of dissonance – they involve

morally problematic behaviors. For this reason, such acts may become highly valued, especially because they can no longer be changed – valuing the act is a way of reducing dissonance. Social rituals, therefore, develop around these acts both because they become valued (through the process of dissonance reduction) and because ritualizing such behavior and attaching it to cherished group identities serves to ensure that the value attached to these acts is maintained. This, in turn, continues to protect citizens from experiencing discomfort associated with past atrocities (cf., Aquino, Reed, & Freeman, 2007) and in this same way may even facilitate future atrocities (Paez & Liu, 2011).

We suggest that there are two key ways in which dissonance can be outsourced to societies at large: through *institutionalization* and *ritualization*. Institutionalization refers to the tendency for immoral behavior to become embedded within social structures and practices, where government bodies, companies, or other social structures operate in ways that perpetuate such behavior. Here, however, we focus on the ways in which institutions may operate in order to protect people from dissonance associated with their immoral behavior. In the case of meat-eating, this has been achieved by obscuring meat production from the consumer. The production, marketing, and sale of meat actively ensure that individuals can eat meat without necessarily connecting it to the animals from which it came (Hoogland, de Boer, & Boersema, 2005). This disconnect between meat and meat-animals has become embedded within our social practices and institutions, in part achieved through the remote location of farming and slaughtering. Intensive farm operations and slaughterhouses are typically located in remote or inaccessible places (Fox, 1997, cited in Plous, 2003), often for good economic reasons. In addition to physical distance, there is considerable informational distance; farm animals receive less media coverage than wild animals (e.g., Singer, 1991). Indeed, the general lack of media coverage of the process, scope, and impact of meat production limits individual's access to information about meat by mass media (e.g., Joy, 2011). Although there may be good economic, health, and security reasons for isolating meat production, we suggest that it also serves to avoid consumer dissonance. This function, of the separation of

production from product, is evident in the apparent hesitancy of large scale abattoirs and factory farms to engage with critical inquiry and transparency (e.g., Foer, 2010). By making meat production distant from the consumer, people need not think about the path from paddock to plate.

The marketing of meat also plays a keen role in ensuring that meat is cleanly separated from its animal origins. Meat is generally packaged without reminders of the animal from which it came. Body parts associated with life or personality of an animal – such as eyes, face, or tail – are rarely included on supermarket shelves (Plous, 1993). The simple act of giving meat products different names to the animals from which they came (e.g., pigs to pork, cows to beef, calves to veal) can help break the animal-meat association. We eat ‘beef’ but not ‘cows’ and ‘pork’ but not pigs (see also Mitchell, 2011). In this way, language is employed to create distance and legitimize the use of animals for meat (see Plous, 1993, 2003, for a thorough discussion; Hyers, 2006; Leach, 1964; Rasmussen, Rajecki, & Craft, 1993). This process of naming meat is similar to ‘euphemistic labelling’ as Bandura (1999) highlighted in his theory of moral disengagement. In the same way Bandura (1999) argued that people can commit immoral acts by using language to obscure or change the meaning of their actions, so too we suggest they can engage in meat-consumption without feeling dissonance by obscuring the animals killed to produce the meat.

The second way that dissonance reduction may become embedded within social norms and institutions is through the process of ritualization. Similar to habits, people engage in ritualized behavior without questioning its logic or reflecting on its direct causal consequences (Whitehouse, 2004). It is for this reason that rituals spread through social contexts over time and space and become embedded through developmental and socialization processes (Legare, Wen, Herrmann, & Whitehouse, 2015; Nielsen, Kapitány, & Elkins, 2015). Rituals are transferred through imitation, and are performed because ‘it is the way it is done’. Indeed, the practice of meat-eating is highly ritualized. Whether it is the Thanksgiving turkey in the U.S., the Sunday roast in Great Britain, Easter lamb for Orthodox Christians, the backyard barbeque in Australia, or beef and mutton for the

Muslim holy day of Eid al-Adha, meat is central to these treasured cultural traditions (Foer, 2010). The use of meat in these contexts is rarely questioned and is taken as central to the tradition itself. As with other rituals, the reason why we eat roasts on Sundays or turkey for Christmas is not at all clear, there is a high degree of casual opacity (see Whitehouse, 2004) meaning that we imitate these behaviors rarely asking the question of *why*.

It is through this same process of ritualization that meat becomes symbolic of a large number of cultural identities (e.g., DeSoucey, 2010). For example, meat-eating is often viewed as a sign of masculinity for men (Newcombe, McCarthy, Cronin, & McCarthy, 2012; Rothgerber, 2013; Ruby & Heine, 2011) and specific ethnic identities may be linked to the consumption of specific types of meat (e.g., Greek with lamb; British with beef; French with ducks, frogs, and snails; Korean with dog meat; Norwegian and Japanese with whale meat). Ritualization means that people begin to eat meat, not only because they enjoy it but because it allows them to express valued social identities.

Ritualization serves to reduce dissonance because it allows people to protect their personal identities through embedding their behavior within the norms, ideals, and manners of a group (see Turner, 1999). In the case of meat-eating, it is often tethered to group meanings and endowed with group significance. Compared to all other foods, meat is vastly more likely to be the target of taboo (Fessler & Navarrete, 2003). Consider, for example, religions' classification of foods as edible and non-edible. Such classifications almost exclusively relate to meat. Neither Muslims nor Jews traditionally eat pork, with Jews additionally abstaining from a range of seafood. Both Muslims and Jews traditionally eat meat prepared in accordance to certain customary practices (e.g., Halal, Kosher). Catholics traditionally do not eat meat on Friday, with traditional Hindu taboos extending

beyond eating beef to prohibit even touching cow flesh. Contravening these norms is often considered a moral transgression, requiring atonement or even exclusion (Wennberg, 2003).

The significance of meat-eating for group membership may not only be defined by rejecting meat or meat prepared a certain way, but by consuming meat and meat prepared a certain way. Meat-eating can allow individuals to assert a positive and valued identity. For example, meat-eaters tend to be viewed as more masculine than vegetarians (Rozin, Hormes, Faith, & Wansink, 2012; Ruby & Heine, 2011; Vartanian, Herman, & Polivy, 2007), an association that has also been noted by a number of scholars (e.g. Adams, 1991; Sobal, 2005; Twigg, 1979). Thus, eating meat – particularly red meat – can be a powerful way masculine individuals can exercise their identity and affirm themselves as members of the group ‘real men’ (Rothgerber, 2013). In other contexts, especially poorer nations where meat is costly and animals are of more use alive than dead, meat-eating may symbolize wealth (Scholliers, 2001). Here, eating meat can confirm a social class group membership, being one of the ‘rich’. In these contexts, meat-eating is a symbol that is endorsed and expected by other group members.

When meat-eating practices are ritualized and embedded within tradition and ceremony, this act may be framed as a pathway to showing commitment to the ingroup. Sharing the Christmas ham, Thanksgiving Turkey, or having a BBQ is characterized as a way of engaging in ‘ingroup love’. Meat-eating is framed as benefiting the group, as promoting group cohesion and positive group identity, therefore detracting from, or potentially justifying, the harm brought to animals. This in turn obfuscates identity-relevant consequences and resolves dissonance.

From Disappearance to Reappearance

Our analysis shows the pathways through which people may seek to ‘actively’ resolve dissonance and how this may in turn foster psychological and social structures that ‘passively’ avoid dissonance. To this end, habits, institutions, and rituals throw a powerful veil over immoral

behavior. In doing so, they protect people from the need to confront their morally troublesome actions, and this in turn protects them from the experience of cognitive dissonance and subsequent motivation toward dissonance reduction. Given these dissonance avoiding psychological and social structures, one might wonder on what basis dissonance associated with such actions would ever arise? We suggest these structures truly operate like a veil; they are an imperfect cloak – at times becoming transparent. Reminders of harm will pierce it; perhaps a child asks us why we eat cows or we see a pigs head in a butchers' window. Eating out with friends and having one say 'I'm a vegetarian, could you take the meat off that pizza?' will prick our sense of personal responsibility; we choose to eat meat (see Rothgerber, 2014). In simple, banal interactions like this the veil is pierced, the convenient invisibility of immorality ends, and dissonance makes a reappearance.

When confronted with their own immorality people can engage in a range of proximal, personal defenses to reduce their dissonance. As we review above, derogating animals' minds and moral standing can alleviate our negative emotions (Bastian et al, 2012) and help resolve the dissonance. Justification structures like the '4N's of meat eating' can help reduce our perceived personal responsibility for the immoral behavior (Piazza et al., 2015). In short, people have a range of psychological defenses around their immoral behaviors that serve to resist behavioral change. The personal and social structures that help render the immorality of behavior invisible are useful but imperfect. They help people avoid the mental and emotional labor of dissonance reduction, allowing them to engage in potentially troublesome behavior without incurring the costs of doing so. When immorality reappears people are not lost for ways to defend their psychological equanimity, they just seldom feel the need to.

Our analysis also suggests that in the absence of social and psychological structures for avoiding dissonance, people may be especially effective at relying on more active strategies. Whether it be farmers or abattoir workers, these individuals will be unable to rely on the sanitization of supermarkets or media bans to avoid the experience of dissonance. Moreover, their

direct exposure to acts of harm will provide cause for conscious reflection. Under such conditions, a reliance on active strategies to avoid dissonance will be apparent, and such strategies are likely to be especially well honed.

Finally, our analysis also provides insight into the process through which immoral behaviors that have become embedded within a particular social context can be changed. We would argue that due to the motivational pull of dissonance reduction, gradual change is unlikely. When individuals become aware of the immorality of a particular behavior, they will experience dissonance. If strong enough, this experience of discomfort may lead to behavioral change. In such cases, however, the influence of this behavioral change may be like a drop in the ocean when habits, institutions, and rituals provide a powerful anchor for people to avoid dissonance over their own morally troublesome acts. Forerunners of such change are, therefore, just as likely to be ostracized or derided for their change of heart, and this response itself could trigger stronger behavioral commitment within others. If widespread change does occur, it is likely to be catastrophic, where acute circumstances raise the experience of dissonance within large segments of a given population simultaneously. As the process of social influence reverses and collective soul searching leads to the deconstruction of protective social norms, feelings of unresolved dissonance will motivate a push towards prohibition and behavior change.

A broader example of exactly this process comes from research practices within social psychology and the associated ‘crises’ of recent times. Triggered by the downfall of high profile members within the scientific community, a new awareness of data practices began to emerge, resulting in the development of more explicit standards and expectations within the community at large. Indeed, it is likely that even those individuals who had allowed their practices to cross over into wholly inappropriate behavior would have felt somewhat surprised when the protective cultures within which these practices had grown began to crumble. This also demonstrates that catastrophic change is likely to occur when examples of more extreme and less justifiable behavior

pierce the collective conscience. Such examples give rise to change because they overwhelm available mechanisms for both the ‘active’ resolution and ‘passive’ avoidance of dissonance.

Broader Theoretical Implications

Drawing on the meat-paradox we have aimed to develop a motivational account of unethical behavior. In doing so, we have attempted to construct an analysis that is not limited to meat-eating, but which provides broader insight into the ways in which individuals and societies justify and perpetuate morally problematic behavior in general. At its broadest level, our approach provides insight into contexts where people are committed to certain behaviors because they provide a range of personal benefits, and letting go of such behaviors would involve significant personal costs. Yet, at some level these same behaviors also conflict with one’s personal moral standards. Our analysis details how the process of justifying such behavior, and reducing the dissonance associated with it, in turn serves to embed unethical behavior within minds and cultures such that it no longer appears unethical at all. Our approach provides a number of important theoretical extensions which we now detail below.

Implications for understanding unethical behavior

Our approach has a number of important implications for current work on ethical behavior. There is now a body of work focusing on the ways in which unethical behavior may sometimes be motivated by factors such as social norms (Gino, Ayal, & Ariely, 2009), one’s goals (Schweitzer, Ordóñez, & Douma, 2004), self-interest (Gino & Pierce, 2009; Mazar, Amir, & Ariely, 2008), and the extent to which one’s behavior can be rationalized or justified (Ayal & Gino, 2011; Gino & Ariely, 2012; Sachdeva, Iliev, & Medin, 2009; Shalvi, Dana, Handgraaf, & De Dreu, 2011; Shu, Gino & Bazerman, 2011; Tenbrunsel, Diekmann Wade-Benzoni, & Bazerman, 2010). In line with our approach, scholars in this field have begun to draw on dissonance theorizing to understand the

motivational properties of unethical behavior (Barkan, Ayal, Gino, & Ariely, 2012; Shalvi, Gino, Barkan, & Ayal, 2015). This perspective is also consistent with past work showing that cognitive limitations and systematic biases operate outside of consciousness and limit people's awareness of their misconduct (Banaji, Bazerman, & Chugh, 2003; Baumeister & Newman, 1994; Chugh, Bazerman, & Banaji, 2005). These implicit processes help people reframe unethical behavior, reinforcing a sense of consistency between behaviors and desired moral standards, and sustaining a positive self-image (Kunda, 1990; Lydon, Zanna, & Ross, 1988; Ross, McFarland, Conway, & Zanna, 1983).

Our analysis adds to this work in a number of important ways. Consistent with classic accounts of dissonance as grounded in self-perception (e.g., Aronson, 1968; Stone & Cooper, 2001), scholars of unethical behavior have tended to focus on the ways in which people protect their self-image in order to reduce dissonance (e.g., Ayal & Gino, 2011; Shalvi, Gino, Barkan, & Ayal, 2015). Our analysis adds to this recent work, by identifying two additional avenues through which dissonance associated with one's unethical behavior can be reduced; by diminishing harm and reducing responsibility.

In terms of diminishing harm, we link our analysis to work identifying the importance of perceived harm for immoral behavior (e.g., Gray, Young, & Watz, 2012). Furthermore, we draw on research in the field of social cognition showing the various ways that people can adjust their perceptions of the targets of their actions (e.g., Haslam, 2006; Haslam et al., 2005; Haslam & Loughnan, 2014; Haslam, Bain, Douge, Lee, & Bastian, 2005; Loughnan & Haslam, 2007) and the role of categorization in facilitating this process (Tajfel & Turner, 1979, 1986; see also McGarty, 1999). Our analysis shows that people can reduce the identity-relevant consequences of their harmful actions, and any associated dissonance, by changing how they perceive the morally-relevant qualities of their victims. To this end, our analysis links dissonance theorizing and prior work on justifications for immoral behaviour, to research on the role of dehumanization (Castano &

Giner-Sorolla, 2006; Jackson & Gaernter, 2010; Leidner, Castano, & Ginges, 2013) and victim derogation (Imhoff & Banse, 2009) in reducing the identity-relevant consequences of harmful acts towards others in general. As such, our analysis also identifies the process through which ongoing harmful and immoral behavior can be perpetuated: When one's victims are viewed as less-than-human, objectified, or derogated, these perceptions can serve to facilitate and justify future harm (e.g., Bastian, Denson, & Haslam, 2013; Bernard, Loughnan, Godart, Marchal, & Klein, 2015; Loughnan, Pina, Vasquez, & Puvia, 2013; Viki, Osgood, & Phillips, 2013).

Another way that our analysis adds to past work in this field is that it identifies specific ways in which people can frame their actions in order to reduce perceived responsibility for harm; by viewing their behavior as natural, normal, and necessary. We note evidence for this in the various ways that people understand the act of meat-eating, yet this same tendency is also apparent in other domains. For instance, it is well-established that identifying the roots of behavior in biology both increases the perceived naturalness of the behavior and undermines personal agency and perceived personal choice (see Dar-Nimrod & Heine, 2011; Dar-Nimrod & Lisandrelli, 2012; Dar-Nimrod, Cheung, Ruby, & Heine, 2014). Commonly termed biological essentialism, this belief can serve to perpetuate a reliance on stereotypes (Bastian & Haslam, 2006) in ways that may shape individual behavior (Dar-nimrod & Heine, 2006) and intergroup relations (Bastian & Haslam, 2008), and may be relied on to justify inequity and other forms of unfair behavior (Keller, 2005; Williams & Eberhardt, 2008; Kraus & Keltner, 2013). So too, normalization is evident in certain forms of sexism, where people fail to question the low numbers and tenuous position of female political and corporate leaders, and why women are more frequently cheerleaders rather than sporting hero's or are scrutinized over their wardrobes more than their policy making (Archer, Iritani, Kimes, & Barrios, 1983; Aubrey, 2006; Rudman & Glick, 2001; Ryan & Haslam, 2005). Indeed, women are commonly portrayed in a narrow and stereotypical way (e.g., Zurbriggen, Ramsey, & Jaworski, 2011) and gender inequality is implicitly viewed as acceptable or justifiable

(Crandall, Eshleman, & O'Brien, 2002), sometimes by women themselves (Williams & Wittig, 1997). Finally, necessity has been invoked to understand the psychology of evil, and how it is that even highly immoral behaviors such as genocides can come to be seen as moral necessities (Haslam & Reicher, 2007). Our analysis shows how these three beliefs can resolve dissonance associated with meat-eating, yet it should be clear that the same dynamic can be observed across a range of domains, thereby adding to our understanding of the ways in which people deny personal responsibility for unethical behavior and reduce dissonance.

The similarities between our analysis and Bandura's model of moral disengagement are noteworthy. Bandura (1999) argued that people have a 'moral self' which they are motivated to protect in the face of their immoral actions and they may do so by employing similar strategies to those we focus on here. Yet, moral disengagement theory details a primarily cold, cognitive process, involving comparison, knowledge, attribution, and intentionality. Our motivational account goes beyond this, identifying hot, emotional pathways that motivate attitudes and behavior. Rather than a more abstract perception of our moral self-image, we argue it is the proximal emotional pressure to resolve dissonance that shapes our behavior and beliefs.

In addition to identifying specific pathways towards dissonance reduction, our analysis also provides for an understanding of how this process may *increase* behavioral commitment. Previous accounts (including Bandura's) have focused on how people can reduce dissonance, thereby allowing for the continuation of behavior uninhibited by negative affect or moral conflict. Our analysis makes a significant extension on this work by drawing on recent developments within the field of cognitive dissonance, specifically the action-based model of dissonance (Harmon-Jones, Amodio, & Harmon-Jones, 2009). Based on this model we are able to provide an analysis of how dissonance reduction itself can serve to increase commitment to immoral behavior. This can also shed new light on old findings. As we note above, people became more committed to killing bugs in order to justify their past bug killing (Martens et al., 2007). This shares many similarities with

the tendency for participants in Milgram's (1963) classic obedience studies to commit to increasingly harmful acts, possibly motivated by the need justify the previous harms they had just perpetrated. Our motivational account does not require concepts such as obedience to understand commitment to harmful behavior.

Finally, perhaps the most important contribution of our analysis is to show how the process of dissonance reduction can begin to shape minds and cultures, through the formation of habits, the spread of those habits, and finally the formation of cultural rituals and social institutions. For the first time we build a theoretical link between the individual-level outcomes of dissonance reduction (i.e., increased behavioral commitment) and societal-level process (i.e., the spread of morally troublesome behavior and its reinforcement through social and cultural practices), showing how immoral behavior can become embedded within minds and societies in ways that hide its harmful effects.

Although speculative, our analysis provides an account of how micro- and macro-level processes converge to justify and perpetuate immoral behavior, thereby building on the largely individual-level approaches developed in previous work (e.g., Bandura, 1999; Shalvi, Gino, Barkan, & Ayal, 2015).

Our approach sheds new light on a range of societal practices and how they may be motivated by the experience of dissonance. Take for example the ways in which refugees and asylum seekers are typically separated from the population and kept in 'processing areas' situated in remote locations; for example, in the case of Australia, literally on small islands separated from the mainland (Fazel & Silove, 2006). Like the location of abattoirs, there can be good security reasons for this, but it also serves to make detention difficult to see. The media can fail to report on the experiences of refugees (Schimmel, 2009), sometimes through a government ban on such reporting (Barns & Newhouse, 2015) akin to the meat industries unwillingness to allow open media coverage of livestock processing. When coverage and discussion do occur, powerful institutions

employ euphemistic labels such as ‘boat people’, ‘border-jumpers’, ‘illegals’, or ‘economic migrants’ to describe people who may well fall under the UN definition of refugee or asylum seeker. This labelling helps people reframe the victims of this discriminatory treatment and obscures the rights and treatments to which they may be entitled. By making the discriminatory treatment of foreign minorities distant, difficult to see, sanitized, and euphemistically labelled, institutions help their populations avoid the experience of their participation in a system of discrimination as immoral – in part because they do not experience the discomfort of dissonance.

Implications for understanding prejudice

Our dissonance-based account of meat-eating also has much to offer research on prejudice. Indeed, there are many parallels between our analysis of meat-eating and prejudicial behavior. To draw out this connection, just as omnivores receive realistic (gustatory) and economic (meat industry) benefits from their consumption of animals, people can derive realistic or economic benefits from endorsing stereotypes that maintain status inequalities between groups (Adorno, Frenkel-Brunswik, Levinson & Sanford, 1950; Hogg & Abrams, 1988; Katz & Braly, 1935; Lippmann, 1922; Tajfel, 1982). Meat-eating can serve an important role in defining cultures and identities, just as prejudice can serve to protect important cultural and group symbols and identities (Altemeyer, 1981; Stephan & Stephan, 2000; Tajfel & Turner, 1979). People may also seek to justify their prejudicial behavior in similar ways. They may seek to obscure the moral qualities of targets (e.g., Haslam, 2006), they may seek to change their understanding of their own behavior in order to reduce perceived responsibility for harm (e.g., by viewing their behavior as benevolent; Dixon et al. 2012; Fox-Genovese & Genovese, 2005; Glick et al., 2004), or they may seek to protect their identities in other ways (e.g., judging others more harshly; Baumeister, Smart, & Boden, 1996).

Meat-eating provides many useful parallels for understanding subtle, stubborn, and culturally embedded forms of prejudice that have become normalized and institutionalized. In fact, prejudice may be the most prototypical of immoral behaviors that becomes embedded in minds and cultures, allowing it to slip under the veil of obscurity such that it seemingly disappears. Just as few are comfortable with appearing immoral, few are comfortable with being viewed as prejudiced, instead seeking to justify their prejudices as natural, normal, or necessary. Throughout history, when prejudice has become extreme and led to terrible outcomes, it has generally occurred within a social context that justifies and normalizes its existence – the Nazi’s were fighting for the human race, the Hutus and Tutsi’s for their status and land, and the Northern Irish for their independence. Frequently, from an insider’s perspective, there does not appear to be any prejudice at all.

In line with our analysis, prejudice may disappear, but also re-emerge, with our understanding of what is considered ‘prejudiced’ varying across time and space. During the last century many societies have become more sensitive to blatant or more explicit forms of prejudice (Judd, Park, Ryan, Brauer, & Kraus, 1995) especially when targeted at racial, religious, or gender-based groups. Many centuries ago slavery was considered natural and was commonplace, yet in 1865 it was abolished within America. In the past women were, in some contexts, considered mere commodities owned by fathers and husbands, yet today gender equality is increasingly entrenched. In addition to the progress of rights regardless of ethnicity and gender, increasingly more groups are added to our scope of moral concern (Lecky, 1869; Pinker, 2011; Singer, 1981) leading to the development of new sensitivities to prejudice. Today, rather than fighting for women or former slaves to be awarded moral standing, some fight for non-human beings to be afforded the same (Glendinning, 2008).

Our approach offers new insights into research on prejudice by providing a motivational perspective and detailing how attitudes and behavior may become embedded within minds and cultures. Indeed, there is now a large body of work showing how prejudices can become implicit

(e.g., Greenwald, McGhee, & Schwartz, 1998; Greenwald, Poehlman, Uhlmann, & Banaji, 2009), a form of prejudice that can be hard to control (Devine, Monteith, Zuwerink, & Elliot, 1991). One model of prejudice that shares some similarities to our own approach, is the justification-suppression model (JSM; Crandall & Eshleman, 2003). This model suggests that people have a genuine level of prejudice, but that they suppress their expression of that prejudice in order to meet social and personal goals. In this way, individual-levels of prejudice expression are influenced by the social context, either by being suppressed or justified and expressed. Despite these similarities, our analysis provides for a range of novel perspectives and extensions on the JSM. First, the JSM presumes that people acquire prejudice early and firmly. Our approach adds to this by showing additional sources of prejudice that are motivated by peoples' immediate as well as ongoing needs and desires. Second, the JSM model argues that people are motivated to justify and in turn express their prejudices. Our dissonance-based approach adds to this by showing how the process of justifying prejudice not only *releases* prejudice, but may also *increase* commitment to prejudice. This in turn has novel implications for understanding how to reduce prejudice. Finally, whereas the JSM model details how social norms may impact on individual-level prejudice, our approach details the process through which individual attempts to resolve dissonance may lead to the development of supportive social norms. We review each of these contributions below.

Where does prejudice come from?

Our dissonance-based analysis provides a novel perspective from which to understand sources of prejudice. Although it aligns with a number of existing approaches that view prejudice as arising from self- or group-serving behavior (e.g., Allport, 1954; Katz & Braly, 1935; Ashmore & McConahay, 1975; Bar-Tal, 1989; Herek, 1986; Snyder & Miene, 1994; Adorno, Frenkel-Brunswik, Levinson, & Sanford, 1950; Scully, & Marolla, 1984; Staub, 1989; Sykes, & Matza, 1957), it introduces novel motivational drivers of prejudice. Specifically, compared to the more

common view of prejudice as arising from avoidance motivated states (e.g., such as from a range of threats, Greenberg et al., 1990; Neuberg & Schaller, 2016; Shaller & Neurberg, 2012; Stephan & Stephan, 2000, or disgust, Hodson & Costello, 2007) our analysis highlights the role of appetitive or *approach motivated states* in driving prejudice. In the case of meat-eating the appetitive motivation is clear – people reduce dissonance and maintain prejudice so that they can engage in untroubled meat-consumption.

This same dynamic is also evident elsewhere. For instance, objectification theorists have long struggled with the reasons *why* people objectify others (see Loughnan & Pacilli, 2014). Although likely multiply determined, one reason may be to facilitate the satisfaction of an appetitive drive towards sex. For heterosexual men, sexual appetite increases a commitment to having sex with women, and this in turn motivates perceptions of women that facilitate the effective enactment of that behavior. Indeed, there is evidence that men's motivation towards sex increases their tendency to objectify (although see Teng, Chen, Poon, & Zhang, 2015 for an account of why this may sometimes backfire). Vaes and colleagues (Vaes, Paladino, & Puvia, 2011) subtly primed people with a sex goal and measured their subsequent objectification of women. They found that sex-primed men – but not women – had more difficulty associating women with human characteristics, indicating that active sex goals impede recognition of women's humanity. Objectification of women draws attention to their sexual qualities, allowing for them to be treated as objects of desire, and facilitating men's untroubled pursuit of sexual satisfaction. The tension between sex goals and female humanity becomes more evident when considering men whose sex goals may be fulfilled in ways which violate the moral rights of women. Rudman and Mescher (2012) found that men with high rape proclivity and a high likelihood to sexually harass women – indicative of an appetitive drive which additionally causes harm or suffering – also report higher levels of objectification, seeing women as similar to animals or objects.

Although our example of objectification may not be viewed as prejudice per se, our analysis provides novel ground for developing new hypotheses regarding the role of approach motivational states in promoting prejudice. Consider the role of economic motives in driving convenient perceptions of people who are capable of providing cheap labor. Just as prejudice towards Blacks allowed for the continuation of slavery, prejudice towards those who work in sweatshops around the world allows for the continuation of profits. From this perspective prejudice may not only arise from the threats that ‘they’ represent to ‘us’, by also from the benefits that ‘we’ can derive from ‘them’. Bringing an understanding of approach motivational states to bear on prejudice research has the potential to open new and insightful lines of inquiry.

How can we resolve prejudice?

There is now a long history of applying dissonance thinking to work on prejudice. Almost exclusively, however, this approach has been focused on the ways in which arousing dissonance may help to resolve prejudice (Bierly, 1985; Eisenstadt, Leippe, Stambush, & Rauch, 2005; Gawronski, & Strack, 2004; Leippe, & Eisenstadt, 1994; although see Rasinski, Geers, & Czopp, 2013). By drawing on updated theories of dissonance (i.e., the action-based model) our analysis shows the ways in which dissonance may serve to reinforce rather than resolve prejudice. Whereas dissonance-associated discomfort may lead to a change in prejudiced behavior, our analysis suggests that when that behavior satisfies one’s personal (or group) needs and desires feelings of discomfort may just as readily increase behavioral commitment. Furthermore, our analysis highlights the ways in which this process may embed prejudice within minds, and spread that prejudice within societies, fostering supportive cultures that camouflage prejudice.

In a recent review Paluck & Green (2009) concluded that prejudice interventions show considerable variability in the likelihood, degree, and conditions of their success. Our motivational approach provides a novel perspective from which to understand this variability in success.

Interventions designed to reduce prejudice traditionally attempt to raise awareness through experiential contact or the provision of information and education, thereby lifting the veil of invisibility. Yet, according to our analysis, when people are committed to their prejudicial behavior, but feel that their identities are being threatened, they find ways to resolve feelings of discomfort and this process itself may increase behavioral commitment. Indeed in a field experiment, Paluck (2010) found that prompting discussion around prejudice served to reinforce rather than resolve negative attitudes, suggesting that rather than leading people to relinquish their biases, the discomfort of openly discussing prejudices may lead to motivated efforts to justify them.

Our approach also provides additional insights into the sometimes ironic effects of intergroup contact. Barlow and colleagues found that negative contact experiences with another group can increase prejudice more than positive contact experiences can reduce prejudice (Barlow et al., 2012). When people feel discomfort they are just as likely to increase their prejudice against another group in order to resolve that discomfort. Our analysis also fits with findings that high prejudice individuals tend to avoid intergroup contact and the discomfort that this may bring (Binder et al., 2009; Pettigrew, 1998). Finally, intergroup contact theory originally posited the importance of cultural norms in determining the beneficial effects of contact (Ata, Bastian, & Lusher, 2009). Our approach adds to this understanding, by providing insight into *where* and *when* supportive or non-supportive norms might arise. Specifically, non-supportive norms may be more likely to exist in contexts where intergroup atrocities or inequalities have or continue exist. For instance, the past harms perpetuated against indigenous Australians are likely motivators of salient norms and stereotypes that impede positive contact experiences.

Our approach also adds to our understanding of prejudice reduction. By highlighting the role of motivational drives toward the satisfaction of needs and desires, our approach suggests that left unaddressed these needs and desires may continue to promote prejudice. In the case of meat-eating, raising awareness of the harm associated with animal slaughter may do little when people

believe that meat is the only viable source of protein. Our analysis suggests that addressing this underlying need, by providing education around alternative food sources, may be a more effective pathway in changing this dietary practice. A similar approach may be useful in addressing prejudice towards asylum seekers or immigrants in general, where prejudice is often fostered by a concern over economic resources as illustrated by political rallying cries such as “they will steal our jobs” or “they will overwhelm our welfare system” (e.g., Stephan, & Stephan, 2000). Addressing these sources of realistic threat may be more effective in reducing prejudice than confronting people with images that aim to trigger empathy and compassion. Whilst these emotionally arousing images may have the desired implications for those who do not feel that their jobs will be undermined by the arrival of immigrants, they may have the opposite effect for those who do – leading them to actively reinforce their prejudices. This analysis helps us to understand why these approaches may be more polarization than panacea.

How do supportive norms around prejudice develop?

Our approach to understanding the justification of immoral behavior is largely grounded in the notion that this process directly serves self or group interests. To this extent we detail how the process of dissonance reduction may foster the emergence of social norms that support those interests. In the case of meat-eating the ways in which entire societies characterize animals may shift in order to justify their exclusion from moral concern: when reason was the basis of moral consideration this is what animals lacked (Descartes, 1649) when it was based on having a soul, they were viewed as little more than automata (Aquinas, 1976a, 1976b).

In line with our primary focus on behavior, we have detailed above how immoral behaviors may be enacted with little reflection via the development of habits and the spread of those habits. Yet, our analysis also lends itself to an understanding of how stereotypes may also spread. The process of dissonance reduction will not only lead to increased behavioral commitment, it will also

lead to an increased commitment to cognitions and attitudes that are consonant with that behavior. In the case of meat-eating, such stereotypes would be related to the mental capacities of animals. Indeed, it is only via the notion of stereotypical thinking that we can understand why objectively very similar animals – such as cows and horses – tend to be afforded very different levels of mental capacity. Moreover, evidence suggests that these stereotypical differences in perceived mental capacity are predicted by whether or not a particular animal is viewed as food (see Bastian et al., 2012), thus highlighting how these consensual stereotypes serve to justify the status quo.

It is in this way that our approach shares some similarities with system-justification theory (Jost & Banaji, 1994), which describes how stereotypes serve to maintain and justify the existing social order. This palliative process reduces discomfort associated with ingrained inequalities and intergroup harm. System justification theory was primarily developed to explain why the targets of inequality also endorse justifying stereotypes. It is suggested that they do this in order to defend and maintain the status quo. While our insight into justification processes that may exist in the minds of animals is clearly limited, the broader implications of our approach suggest that our dissonance-based analysis may provide a novel perspective from which to view system justifying tendencies within humans. Although the concept of dissonance has been used to understand the motivation to justify the system (especially in the case of those who are most disadvantaged by it; Jost, Pelham, Sheldon, & Sullivan, 2003), our analysis provides new insights into this process. Specifically, it suggests that when members of low status groups seek to justify the status quo and thereby reduce dissonance, beyond simply reducing discomfort, this process itself may *increase* committed to system justifying stereotypes. That is, by seeking to justify the system, low-status groups not only reduce dissonance associated with their own inequality, they also commit themselves more strongly to that inequality. Our analysis thus provides additional insight into how the status quo can be perpetuated and become embedded, not only with the minds and cultures of the powerful, but perhaps especially the weak. Whereas system-justification theory explains how existing

arrangements are maintained, ours describes how those same arrangements can become deeply embedded and even more entrenched.

Conclusion

When confronted with the harm our culinary choices cause, we work hard to reduce our dissonance and in doing so help create a world where we need not experience that dissonance at all. By focusing on a common, normative, and widely accepted behavior, that also creates moral dissonance for many, our analysis of meat-eating sheds new light on the question of why some immoral, unfair, and prejudicial behaviors are seemingly deeply embedded in our psychology and society. In this paper we have shown how morally troubling behavior becomes ‘embedded’ and how this process in turn makes the immorality of that behavior appear to be invisible; hiding it in our habits, our rituals, and our institutions. When moral conflicts emerge they are met with a suite of convenient beliefs about our (lack of) responsibility, the (lack of) harm it causes, and the (lack of) identity we would experience without it. Critically, we have argued that these forces interlock – the cognitive dissonance immoral behavior creates for people nurtures a psychology and society which can resolve and avoid the experience of the self as immoral.

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Figure 1.

An outline of the motivated account of moral reasoning. Passive dissonance avoidance structures reinforce immoral behavior, when these fail dissonance triggers lead to either behavioral change or active attempts at dissonance reduction. The process of reducing dissonance reinforces immoral behavior and passive dissonance avoidance structures.

